

## ABSTRACT

According to the present apparatus, on multi-throttle apparatus provided with multiple throttle valves 20 that are respectively disposed in multiple intake passages 11, a throttle shaft 30 that simultaneously opens/closes the throttle valves 20, drive means 50 that drives the throttle shaft 30, and a return spring 60, the driving force of the drive means 50 is applied to an approximate center of the throttle shaft 30, the energizing force of the return spring 60 is applied close to the location to which the energizing force is applied, and bearings 40 are provided in mutual intervals between the multiple intake passages 11 to support the throttle shaft 30. Consequently, torsion of the throttle shaft 30 is prevented, and the throttle valves 20 are opened/closed synchronously without generating a phase shift. Consequently, electronic control is provided for multi-throttle apparatuses applied to engines of two-wheeled vehicles and the like, and the synchronization among throttle valves is secured.

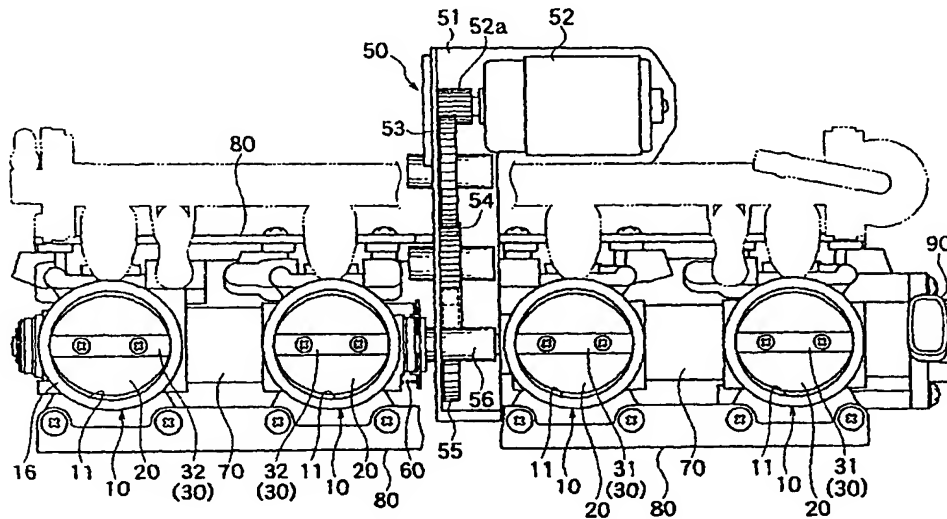
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**(54) Title: MULTIPLE THROTTLE DEVICE**

(54) 発明の名称: 多連スロットル装置



**(57) Abstract:** A multiple throttle device, comprising a plurality of throttle valves (20) disposed in a plurality of intake passages (11), throttle shafts (30) simultaneously opening and closing the throttle valves (20), a drive means (50) driving the throttle shaft (30), and a return spring (60), wherein the drive force of the drive means (50) is allowed to act on the throttle shaft (30) at a generally center position, the energizing force of the return spring (60) is allowed to act on the throttle shaft (30) near an area receiving the drive force, and bearings (40) are installed between the plurality of intake passages (11) to support the throttle shaft (30), whereby since the throttle shaft (30) can be prevented from being twisted, the throttle valves (20) can be opened and closed in synchronism with each other without causing a phase shift, and thus the multiple throttle device used for the engine of a motorcycle can be electronically controlled and the synchronization of the throttle valves can be assured.

〔統葉有〕

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